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Kun-tae Kim

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

LIN, JASON K

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/761,190
Filing Date: January 22, 2004
Appellant(s): KIM, KUN-TAE

Ryan M. Corbett
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 02/01/2010 appealing from the Office action mailed 06/02/2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

2003/0131360	Joung et al.	01-2003
5,555,097	Joung et al.	05-1994
6,839,851	Saitoh	07-1999
6,704,060	Levandowski	08-2001
5,576,760	Akiyama	06-1995
2001/0021998	Margulis	03-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 2, 10, 17, and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joung et al. (US 2003/0131360) hereinafter referred to as Joung'360, in view of Joung et al. (US 5,555,097) hereinafter referred to as Joung'097, and further in view of Saitoh et al. (US 6,839,851).

Consider **claim 1**, Joung'360 teaches a set top box capable of performing wireless transmission (100-Fig.2; Paragraph 0022, 0025, 0075), the set top box comprising:

a digital television receiver, which converts a tuned digital broadcasting signal into a first transport stream (TS) (digital broadcast receiving unit 121-Fig.2; Paragraph 0044);

a TS converting unit (120-Fig.2);

a wireless processing module, which processes one of the first TS and the second TS as a processed output and wirelessly transmits the processed output (130, 140, 150 - Fig.2; Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS. Paragraph 0052-0057 teaches multiplexer 125-Fig.2 switches the transmission packet streams inputted respectively in accordance with the control of CPU 110-Fig.2 selects one of the transmission packet streams for output to be wirelessly transmitted).

Joung'360 does not explicitly teach receives at least one of a progressive scanning image signal input from outside and an external interlaced scanning signal from outside, converts the progressive scanning image signal into an interlaced scanning image signal if the progressive scanning signal is received, and then converts one of the interlaced scanning signal and the external interlaced scanning image signal into a second TS; and

wherein the TS converting unit comprises:

a converter, which converts the progressive scanning image signal input from outside into the interlaced scanning image signal and outputs the interlaced scanning image signal as an output of the converter by separating fields from the progressive scanning image signal and transmitting the separated fields; and

an encoding unit, which converts the external interlaced scanning image signal input from outside or the output of the convert into the second TS, and

further comprises one switching unit operable to received the external interlaced scanning image signal and the interlaced scanning image signal output from the converter and selects one of the external interlaced scanning image signal and the interlaced scanning image signal output from the converter to output to the encoding unit.

In an analogous art Joung'097 receives at least one of a progressive scanning image signal input from outside and an external interlaced scanning signal from outside, converts the progressive scanning image signal into an interlaced scanning image signal if the progressive scanning signal is received, and then converts one of the interlaced scanning signal and the external interlaced scanning image signal into a second output signal (Fig.2; Col 10: line 51 - Col 11: line 7 teaches that both progressive and interlace scanning image signals can be received. If a progressive scanning type image signal is received, it is converted to an interlaced scan signal and then processed. However, if an interlaced scan signal is received it is passed through and then processed); and

a converter, which converts the progressive scanning image signal input from outside into the interlaced scanning image signal and outputs the interlaced scanning image signal as an output of the converter by separating fields from the progressive scanning image signal and transmitting the separated fields (Fig.2; Col 10: line 51 - Col 11: line 7 teaches that both progressive and interlace scanning image signals can be received. If a progressive scanning type image signal is received, it is converted to an interlaced scan signal and then processed); and

a unit, which converts the external interlaced scanning image signal input from outside or the output of the converter into the second output signal (Fig.2; Col 10: line 51 - Col 11: line 20); and

further comprises one switching unit operable to received the external interlaced scanning image signal and the interlaced scanning image signal output from the converter and selects one of the external interlaced scanning image signal and the interlaced scanning image signal output from the converter to output to the unit (Fig.2; Col 10: line 51 - Col 11: line 7 teaches that both progressive and interlace scanning image signals can be received. If a progressive scanning type image signal is received, it is converted to an interlaced scan signal and then processed. If a progressive scanning type image signal is received, it is converted to an interlaced scan signal and then processed. However, if an interlaced scan signal is received it is passed through and then processed. The output from both the signal of the passed through

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interlaced and the signal of the progressive converted to interlaced is passed to SW9-Fig.2 {switching unit} before going to format region converter 26-Fig.2).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Joung'360s system to include receives at least one of a progressive scanning image signal input from outside and an external interlaced scanning signal from outside, converts the progressive scanning image signal into an interlaced scanning image signal if the progressive scanning signal is received, and then converts one of the interlaced scanning signal and the external interlaced scanning image signal into a second output signal; and a converter, which converts the progressive scanning image signal input from outside into the interlaced scanning image signal and outputs the interlaced scanning image signal as an output of the converter by separating fields from the progressive scanning image signal and transmitting the separated fields; and a unit, which converts the external interlaced scanning image signal input from outside or the output of the converter into the second output signal; and further comprises one switching unit operable to received the external interlaced scanning image signal and the interlaced scanning image signal output from the converter and selects one of the external interlaced scanning image signal and the interlaced scanning image signal output from the converter to output to the unit, as taught by Joung'097, for the advantage of allowing a variety of sources to be received, easily handling various formats and making it compatible with the user's system, increasing usability and playability of more media sources.

Joung'360 and Joung'097 do not explicitly teach an encoding unit, converting the signal to a second TS and where the second signal is the second TS.

In an analogous art Saitoh teaches an encoding unit, converting the signal to a second TS, where the second signal is the second TS (Col 4: lines 17-20, 23-26).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360 and Joung'097 to include an encoding unit, converting the signal to a second TS and where the second signal is the second TS, as taught by Saitoh, for the advantage of combining data into a container format , allowing for synchronization of output, simple management and transportation of the media signal.

Consider **claim 10**, Joung'360 teaches a method for performing wireless transmission of television signals (100-Fig.2; Paragraph 0022, 0025, 0075) comprising:

receiving a digital broadcasting signal and converting the digital broadcasting signal into a first transport stream (TS) (digital broadcast receiving unit 121-Fig.2; Paragraph 0044);

a TS converting unit (120-Fig.2);

transmitting one of the first TS and the second TS over a wireless medium (130, 140, 150 - Fig.2; Paragraph 000049-0051 teaches providing multiplexer

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125-Fig2, with first and second TS. Paragraph 0052-0057 teaches multiplexer 125-Fig.2 switches the transmission packet streams inputted respectively in accordance with the control of CPU 110-Fig.2 selects one of the transmission packet streams for output to be wirelessly transmitted).

Joung'360 does not explicitly teach receiving at least one of an progressive scanning image signal and an external interlaced scanning image signal, converting the progressive scanning image signal into an interlaced scanning image signal by separating fields from the progressive scanning image signal and transmitting the separated fields if the external progressive scanning image signal is received, one switching between one of internal interlaced scanning image signal and the external interlaced scanning image signal; and converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal into a second TS; and

wherein the converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal into a second TS comprises:

encoding one of the external interlaced scanning image signal and the internal interlaced scanning image signal into the second TS ; and

converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal received from the one switching, into the second TS

In an analogous art Joung'097 teaches receiving at least one of an progressive scanning image signal and an external interlaced scanning image signal, converting the progressive scanning image signal into an interlaced scanning image signal by separating fields from the progressive scanning image signal and transmitting the separated fields if the external progressive scanning image signal is received, one switching between one of internal interlaced scanning image signal and the external interlaced scanning image signal (Fig.2; Col 10: line 51 - Col 11: line 7 teaches that both progressive and interlace scanning image signals can be received. If a progressive scanning type image signal is received, it is converted to an interlaced scan signal and then processed. However, if an interlaced scan signal is received it is passed through and then processed. The output from both the signal of the passed through interlaced and the signal of the progressive converted to interlaced is passed to SW9-Fig.2 {switching unit} before going to format region converter 26-Fig.2); and wherein the converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal into a second output signal comprises: encoding one of the external interlaced scanning image signal and the internal interlaced scanning image signal into the second output signal; and converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal received from the one switching, into the second output signal (Fig.2; Col 10: line 51 - Col 11: line 20; The output from both the signal of the passed through interlaced and the signal of the progressive

converted to interlaced is passed to SW9-Fig.2 {switching unit} before going to format region converter 26-Fig.2).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Joung'360s system to include receiving at least one of an progressive scanning image signal and an external interlaced scanning image signal, converting the progressive scanning image signal into an interlaced scanning image signal by separating fields from the progressive scanning image signal and transmitting the separated fields if the external progressive scanning image signal is received, one switching between one of internal interlaced scanning image signal and the external interlaced scanning image signal; and wherein the converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal into a second output signal comprises: encoding one of the external interlaced scanning image signal and the internal interlaced scanning image signal into the second output signal; and converting one of the internal interlaced scanning image signal and the external interlaced scanning image signal received from the one switching, into the second output signal, as taught by Joung'097, for the advantage of allowing a variety of sources to be received, easily handling various formats and making it compatible with the user's system, increasing usability and playability of more media sources.

Joung'360 and Joung'097 do not explicitly teach an encoding unit, converting the signal to a second TS, where the second signal is the second TS.

In an analogous art Saitoh teaches encoding and converting the signal to a second TS and where the second signal is the second TS (Col 4: lines 17-20, 23-26).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360 and Joung'097 to include an encoding unit, converting the signal to a second TS and where the second signal is the second TS, as taught by Saitoh, for the advantage of combining data into a container format , allowing for synchronization of output, simple management and transportation of the media signal.

Consider **claim 2**, Joung'360, Joung'097, and Saitoh teach another switching unit which receives the first TS and the second TS and outputs one of the first TS and the second TS as an output of the other switching unit (Joung'360 - Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS. Paragraph 0052-0057 teaches multiplexer 125-Fig.2 switches the transmission packet streams inputted respectively in accordance with the control of CPU 110-Fig.2 selects one of the transmission packet streams for output to be wirelessly transmitted; Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 20; Saitoh - Col 4: lines 17-20, 23-26).

Consider **claim 17**, Joung'360, Joung'097, and Saitoh teach another switching unit which receives the first TS and the second TS and outputs one of

the first TS and the second TS as an output to the wireless processing module (Joung'360 – Fig.2; Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS. Paragraph 0052-0057 teaches multiplexer 125-Fig.2 switches the transmission packet streams inputted respectively in accordance with the control of CPU 110-Fig.2 selects one of the transmission packet streams for output to be wirelessly transmitted; Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 20; Saitoh - Col 4: lines 17-20, 23-26).

Consider **claim 19**, Joung'360, Joung'097, and Saitoh teach another switching between the first TS and the second TS for the transmitting over the wireless medium (Joung'360 – Fig.2; Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS. Paragraph 0052-0057 teaches multiplexer 125-Fig.2 switches the transmission packet streams inputted respectively in accordance with the control of CPU 110-Fig.2 selects one of the transmission packet streams for output to be wirelessly transmitted; Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 20; Saitoh - Col 4: lines 17-20, 23-26).

3. **Claims 3, 8, and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joung et al. (US 2003/0131360) hereinafter referred to as Joung'360, in view of Joung et al. (US 5,555,097) hereinafter referred to as Joung'097, in view of Saitoh et al. (US 6,839,851), and further in view of Levandowski (US 6,704,060).

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Consider **claim 3**, Joung'360, Joung'097, and Saitoh teach output of the other switching unit (Joung'360 - Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS. Paragraph 0052-0057 teaches multiplexer 125-Fig.2 switches the transmission packet streams inputted respectively in accordance with the control of CPU 110-Fig.2 selects one of the transmission packet streams for output), but do not explicitly teach a decoding unit which decodes the output and outputs a decoded TS stream to an image device connected to the set top box by a wire.

In an analogous art Levandowski teaches a decoding unit which decodes the output and outputs a decoded TS stream to an image device connected to the set top box by a wire (Col 3: lines 33-47).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, and Saitoh to include a decoding unit which decodes the output and outputs a decoded TS stream to an image device connected to the set top box by a wire, as taught by Levandowski, for the advantage of supplying a display device readily displayable content, alleviating the need for complex decoding circuitry at the display device, allowing for cheaper manufacturing of corresponding display devices.

Consider **claim 8**, Joung'360, Joung'097, Saitoh, and Levandowski teach wherein the digital television receiver is an advanced television system committee (ATSC) receiver (Joung'360- Paragraph 0044).

Consider **claim 11**, Joung'360, Joung'097, and Saitoh teach the first TS and the second TS (Joung'360- Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS; Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 20; Saitoh - Col 4: lines 17-20, 23-26), but do not explicitly teach decoding the TS and transmitting a decoded signal to an image device through a wire.

In an analogous art Levandowski teaches decoding the TS and transmitting a decoded signal to an image device through a wire (Col 3: lines 33-47).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, and Saitoh to include decoding the TS and transmitting a decoded signal to an image device through a wire, as taught by Levandowski, for the advantage of supplying a display device readily displayable content, alleviating the need for complex decoding circuitry at the display device, allowing for cheaper manufacturing of corresponding display devices.

4. **Claims 5, 9, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joung et al. (US 2003/0131360) hereinafter referred to as Joung'360, in view of Joung et al. (US 5,555,097) hereinafter referred to as Joung'097, in view of Saitoh et al. (US 6,839,851), and further in view of Akiyama (US 5,576,760).

Consider **claim 5**, Joung'360, Joung'097, and Saitoh teach wherein the converter comprises: a down converter, which converts the progressive scanning image signal into the interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields (Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 20), but do not explicitly teach an analog-to-digital converter (ADC), which converts the progressive scanning image signal input from outside into a digital signal; and

converts the progressive scanning image signal converted into the digital signal into the interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields.

In an analogous art Akiyama teaches an analog-to-digital converter (ADC), which converts the progressive scanning image signal input from outside into a digital signal; and converts the progressive scanning image signal converted into the digital signal into the interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields (Col 5: lines 1-20).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, and Saitoh to include an analog-to-digital converter (ADC), which converts the progressive scanning image signal input from outside into a digital signal; and converts the progressive scanning image signal converted into the digital signal into the interlaced scanning image signal by separating the fields from the progressive scanning

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image signal and transmitting the separated fields, as taught by Akiyama, for the advantage of allowing a variety of sources to be received including raw progressive scanning media, handling various formats and making it compatible for use with the user's system, increasing usability and playability of more media sources.

Consider **claim 9**, Joung'360, Joung'097, Saitoh, and Akiyama teach wherein the digital television receiver is an advanced television system committee (ATSC) receiver (Joung'360 - Paragraph 0044).

Consider **claim 13**, Joung'360, Joung'097, and Saitoh teach wherein converting the external progressive scanning image signal into an internal interlaced scanning image signal comprises: down converting the signal into the internal interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields (Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 2), but do not explicitly teach converting the external progressive scanning image signal into a digital signal; and

down converting the digital signal into the interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields.

In an analogous art Akiyama teaches converting the external progressive scanning image signal into a digital signal; and down converting the digital signal into the interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields (Col 5: lines 1-20).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, and Saitoh to include converting the external progressive scanning image signal into a digital signal; and down converting the digital signal into the interlaced scanning image signal by separating the fields from the progressive scanning image signal and transmitting the separated fields, as taught by Akiyama, for the advantage of allowing a variety of sources to be received including raw progressive scanning media, handling various formats and making it compatible for use with the user's system, increasing usability and playability of more media sources.

5. **Claims 7 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joung et al. (US 2003/0131360) hereinafter referred to as Joung'360, in view of Joung et al. (US 5,555,097) hereinafter referred to as Joung'097, in view of Saitoh et al. (US 6,839,851), in view of Akiyama (US 5,576,760), and further in view of Margulis (US 2001/0021998).

Consider **claim 7**, Joung'360, Joung'097, Saitoh, and Akiyama teach the wireless processing module wirelessly transmits the processed output

(Joung'360 - Paragraph 0022, 0025, 0054), but do not explicitly teach transmitting the processed output in a radio frequency range.

In an analogous art, Margulis teaches transmitting the processed output in a radio frequency range (Paragraph 0051, 0055, 0069).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, Saitoh, and Akiyama to include transmitting the processed output in a radio frequency range, as taught by Margulis, for the advantage of providing efficient and interference free transmission of media since most of frequency range is beyond the vibration rate that most mechanical systems can respond to.

Consider **claim 15**, Joung'360, Joung'097, Saitoh, and Akiyama teach transmitting one of the first TS and the second TS over wireless medium (Joung'360 - Paragraph 0022, 0025, 0054; Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS; Joung'097 - Fig.2; Col 10: line 51 - Col 11: line 2; Saitoh - Col 4: lines 17-20, 23-26), but do not explicitly teach transmission is done at a radio frequency.

In an analogous art Margulis teaches transmission is done at a radio frequency (Paragraph 0051, 0055, 0069).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, and Saitoh to include transmission is done at a radio frequency, as taught by Margulis, for the

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advantage of providing efficient and interference free transmission of media since most of frequency range is beyond the vibration rate that most mechanical systems can respond to.

6. **Claims 6 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Joung'360, in view of Joung et al. (US 5,555,097) hereinafter referred to as Joung'097, in view of Saitoh et al. (US 6,839,851), in view of Levandowski (US 6,704,060), and further in view of Margulis (US 2001/0021998).

Consider **claim 6**, Joung'360, Joung'097, Saitoh, and Levandowski teach the wireless processing module wirelessly transmits the processed output (Joung'360 - Paragraph 0022, 0025, 0054), but do not explicitly teach transmitting the processed output in a radio frequency range.

In an analogous art Margulis teaches transmitting the processed output in a radio frequency range (Paragraph 0051, 0055, 0069).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, Saitoh, and Levandowski to include transmitting the processed output in a radio frequency range, as taught by Margulis, for the advantage of providing efficient and interference free transmission of media since most of frequency range is beyond the vibration rate that most mechanical systems can respond to.

Consider **claim 14**, Joung'360, Joung'097, Saitoh, and Levandowski teach transmitting one of the first TS and the second TS over wireless medium (Joung'360 - Paragraph 0022, 0025, 0054; Paragraph 000049-0051 teaches providing multiplexer 125-Fig2, with first and second TS; Dantwala - Fig.2; Col 3: lines 41-51, 58-67; Saitoh - Col 4: lines 17-20, 23-26), but do not explicitly teach transmission is done at a radio frequency.

In an analogous art Margulis teaches transmission is done at a radio frequency (Paragraph 0051, 0055, 0069).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Joung'360, Joung'097, Saitoh, and Levandowski to include transmission is done at a radio frequency, as taught by Margulis, for the advantage of providing efficient and interference free transmission of media since most of frequency range is beyond the vibration rate that most mechanical systems can respond to.

(10) Response to Argument

Appellant argues claims 1, 2, 10, 17, and 19

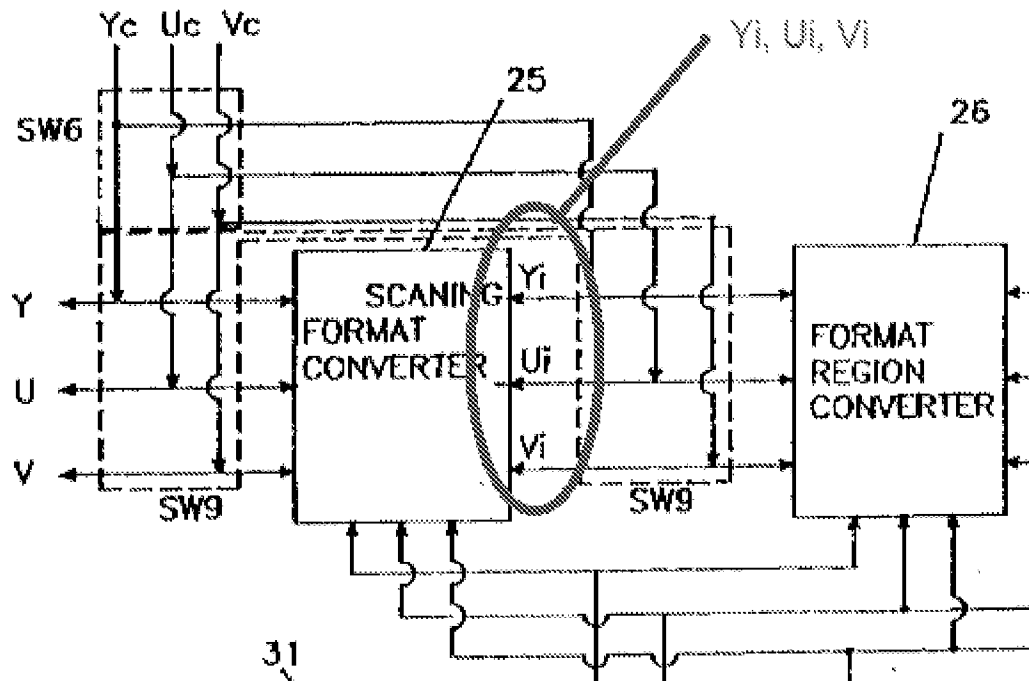
(A) 1. Appellant assert on P.13: line 20 – P.14: line 17 that “switch SW9 of Joung'097 cannot correspond to the claimed one switching unit because switch SW9 does not receive any *interlaced scanning image signal* output from a converter of a TS converting unit... That is, Joung'097 specifies that when the input data is of the interlaced scanning type, it is passed through the switch SW9 to the format region converter (26), but video data converted from progressive scanning type to interlaced

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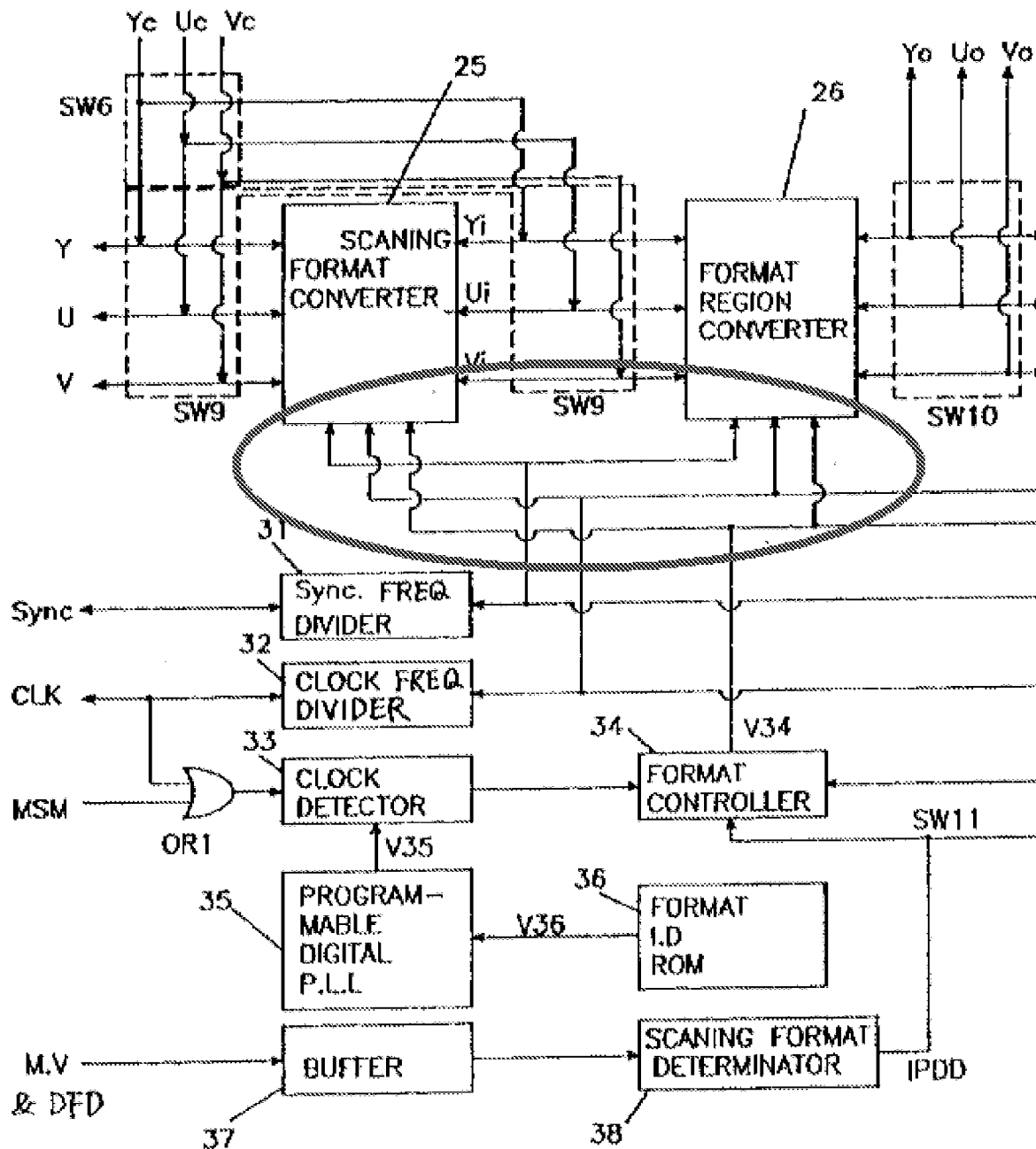
scanning type is 'output... to the format region converter 26' (i.e., without passing through switch SW9). Therefore, although the switch SW9 of Joung'097 may receive at its input unconverted interlaced scanning type video data, the switch SW9 never receives an interlaced scanning signal which was converted from a received progressive scanning image signal..".

In response the examiner respectfully disagrees. Joung'097 was not used to teach a TS converting unit, that was already taught in Joung'360 (120-Fig.2) and further taught by Saitoh (Col 4: lines 17-20, 23-26), it was instead used to teach the handling of progressive and interlaced signals and the switching unit. Furthermore on Col 10: line 62 – Col 11: line 2 of Joung'097, it explicitly states "...the scanning format converter 25 converts the input video data Y, U and V or Yc, Uc, Vc of the progressive scanning type into the video data Yi, Ui and Vi of the interlaced scanning type as shown in FIG.3A, and outputs the converted video data Yi, Ui, Vi to the format region converter 26. It can clearly be seen on Fig.2 that Yi, Ui, Vi outputs to format region converter 26 via switch SW9 (shown below). On Col 10: lines 56-57 of Joun'097 teach "while to pass them through switch SW9 if the format is the interlaced scanning type." It can be seen in Fig.2 and the cited parts of Joung'097 that switch SW9 receives inputs from both that of a down-converted (progressive to interlaced) signal and that of an originally formatted interlaced signal, and selects one to be outputted to the format region converter 26.

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Additionally if appellant may be referring to the possibility of the Yi, Ui, Vi being output to format region converter 26 via the bottom three connections of scanning format converter 25 to the bottom three connection of format region converter 26, shown below...



Please note that the bottom connections circled here are what drives the scanning format converter 25 and the format region converter 26. They are inputs from the circuitry below that provide control signals to the corresponding modules 25 and 26 control their functions. The corresponding circuitry of Fig.2 and the control signals sent

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to the scanning format converter 25 and the format region converter 26 are further taught in Col 4: lines 15-54 of Joung'097.

In view of the following, and as shown explicitly in Fig.2, there is no other way for the output of the converted progressive to interlaced signals Yi, Ui, and Vi to be output to format region converter 26 without going through switch SW9.

2. Appellant asserts on P.15: line 11-20 that "... Therefore, one of ordinary skill in the art would not combine the switch SW9 of Joung'097 with the transmission stream packet stream generating unit 120 of Joung'360 because switch SW9 is designed to receive component video signals, not transport stream packets. Further, the scanning format converter 25 is designed to convert component video signals, not transmissions stream packets.

In response the examiner respectfully disagrees. As shown in the office action, the TS converting unit, was already taught in Joung'360 (120-Fig.2) and Saitoh (Col 4: lines 17-20, 23-26) taught an encoding unit, converting the signal to a second TS, where the second signal is the second TS. The minor difference is merely in formats, which both are well know at the time of the invention, and one of ordinary skill of the art would readily know how to modify and combine the references accordingly for the advantages of allowing a variety of sources to be received, easily handling various formats and making it compatible with the user's system, increasing usability and playability of more media sources, as well as for the advantage of combining data into a container format, allowing for synchronization of output, simple management and

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transportation of the media signal as stated in the office action. Furthermore, one of ordinary skill in the art would readily see the advantages of utilizing a TS such as digitizing and creating a more robust and efficient transmission scheme. Therefore, both technologies existed at the time of the invention, and since one of ordinary skill in the art would readily see the advantages of utilizing one format over the other, one of ordinary skill of the art would be ready to modify and combine the prior art of record as such as shown in the Office Action.

Appellant argues claims 3, 8, and 11

(B) Appellants assertions are the same as those from part (A) above and have been addressed by examiner's response in part (A).

Appellant argues claims 5, 9, and 13

(C) Appellants assertions are the same as those from part (A) above and have been addressed by examiner's response in part (A).

Appellant argues claims 7 and 15

(D) Appellants assertions are the same as those from part (A) above and have been addressed by examiner's response in part (A).

Appellant argues claims 6 and 14

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(E) Appellants assertions are the same as those from part (A) above and have been addressed by examiner's response in part (A).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jason Lin/
Jason Lin
Patent Examiner
Art Unit 2425

Conferees:

/Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425

/Christopher Grant/

QAS, TC 2400